

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A manufacturing method of an SOI wafer, comprising ~~the steps of~~:

bonding a wafer for active layer with a supporting wafer via an insulating film interposed therebetween to thereby form a bonded wafer; and then

reducing a film thickness in a part of said active layer wafer of said bonded wafer to thereby form an SOI layer for manufacturing said SOI wafer, wherein said supporting wafer contains boron by an amount of 9×10^{18} atoms/cm³ or more; and

forming a rear surface insulating film on a surface opposite to the bonding surface of the supporting wafer prior to said bonding.

2. (Currently Amended) A manufacturing method of an SOI wafer in accordance with claim 1, further comprising ~~the steps of~~:

ion-implanting of hydrogen gas or a noble gas element to said active layer wafer to thereby form an ion-implanted layer in said active layer wafer;

subsequently bonding said active layer wafer and said supporting wafer together to thereby form a bonded wafer; and then

heat treating said bonded wafer to thereby induce cleavage in said bonded wafer at the site of said ion-implanted layer as an interface.

3. (Currently Amended) A manufacturing method of an SOI wafer in accordance with claim 1, in which a thickness of said SOI layer is less than 0.10 μm ~~or thinner~~.

4. (Currently Amended) A manufacturing method of an SOI wafer in accordance with claim 2, in which a thickness of said SOI layer is less than 0.10 μm ~~or thinner~~.

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Previously Presented) A manufacturing method of an SOI wafer in accordance with claim 1, in which said supporting wafer is subjected to annealing at 1100°C or higher in a reducing gas atmosphere containing hydrogen gas before said step of bonding.

10. (Currently Amended) An SOI wafer comprising:

~~manufactured by a method comprising the steps of: bonding a wafer for active layer bonded with a supporting wafer via an insulating film interposed therebetween, wherein to thereby form a bonded wafer; and then~~

said wafer for active layer has a thickness of less than 0.10 μm ;

said supporting wafer comprises boron by an amount of 9×10^{18} atoms/cm³ or more; and

a rear surface oxide film having a thickness of 0.1 μm to 0.5 μm is formed on a surface opposite to the bonding surface of said supporting wafer ~~reducing a film thickness in a part of said active layer wafer of said bonded wafer to thereby form an SOI layer for manufacturing said SOI wafer, wherein said supporting wafer that has been bonded contains boron by an amount of 9×10^{18} atoms/cm³ or more, and said SOI layer has a thickness of 0.10 μm or thinner.~~

11. (Previously Presented) A manufacturing method of an SOI wafer in accordance with claim 2, in which said supporting wafer is subjected to annealing at 1100°C or higher in a reducing gas atmosphere containing hydrogen gas before said step of bonding.

12. (Previously Presented) A manufacturing method of an SOI wafer in accordance with claim 3, in which said supporting wafer is subjected to annealing at 1100°C or higher in a

reducing gas atmosphere containing hydrogen gas before said step of bonding.

13. (Previously Presented) A manufacturing method of an SOI wafer in accordance with claim 4, in which said supporting wafer is subjected to annealing at 1100°C or higher in a reducing gas atmosphere containing hydrogen gas before said step of bonding.

14. (Currently Amended) A manufacturing method of an SOI wafer in accordance with claim [[5]] 18, in which said supporting wafer is subjected to annealing at 1100°C or higher in a reducing gas atmosphere containing hydrogen gas before said step of bonding.

15. (Currently Amended) A manufacturing method of an SOI wafer in accordance with claim [[6]] 19, in which said supporting wafer is subjected to annealing at 1100°C or higher in a reducing gas atmosphere containing hydrogen gas before said step of bonding.

16. (Currently Amended) A manufacturing method of an SOI wafer in accordance with claim [[7]] 20, in which said supporting wafer is subjected to annealing at 1100°C or higher in a reducing gas atmosphere containing hydrogen gas before said step of bonding.

17. (Currently Amended) A manufacturing method of an SOI wafer in accordance with claim [[8]] 21, in which said supporting wafer is subjected to annealing at 1100°C or higher in a reducing gas atmosphere containing hydrogen gas before said step of bonding.

18. (New) A manufacturing method of an SOI wafer in accordance with claim 1, wherein a thickness of said rear surface insulating film is 0.1μm to 0.5μm.

19. (New) A manufacturing method of an SOI wafer in accordance with claim 18, further comprising:

ion-implanting of hydrogen gas or a noble gas element to said active layer wafer to thereby form an ion-implanted layer in said active layer wafer;

subsequently bonding said active layer wafer and said supporting wafer together to thereby form a bonded wafer; and then

heat treating said bonded wafer to thereby induce cleavage in said bonded wafer at the site of said ion-implanted layer as an interface.

20. (New) A manufacturing method of an SOI wafer in accordance with claim 18, in which a thickness of said SOI layer is less than 0.10 μm ~~or thinner~~.

21. (New) A manufacturing method of an SOI wafer in accordance with claim 19, in which a thickness of said SOI layer is less than 0.10 μm ~~or thinner~~.